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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/487,312	01/19/2000	Yushi Kaneko	35.G2531	3013

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EXAMINER
ABELSON, RONALD B

ART UNIT	PAPER NUMBER
2666	6

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/487,312	KANEKO, YUSHI	
	Examiner	Art Unit	
	Ronald Abelson	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 January 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroshima (US 5,801,781).

Regarding claims 1, Hiroshima teaches a method and apparatus for an encoding apparatus for packetizing (fig. 4 box 32) variable-length encoded data (MPEG1 system streams, col. 2 lines 51-54) by a packet format in which a header of a packet has an area indicating the length of the packet (fig. 7 box 136, col. 9 lines 21-23) and the range of values indicating the packet length is limited (fig. 7 box 136, 190).

The system comprises an inputting means for inputting variable length encoding image data that includes a picture header indicating the start of one picture (fig. 4: Video ES stream, fig. 7 box 138). The inputting means occurs prior to the Video ES stream reaching the PES PACKETIZER (fig. 4 box 32).

The system comprises a header detecting means for detecting the picture header input by said inputting means (fig.

4: Video ES stream, fig. 7 box 138). The header detector means occurs at the PES PACKETIZER (fig. 4 box 32). If the system could not detect the header then the multiplexer (fig. 4 box 32) could not divide the packets col. 8 lines 4-7).

The system comprises a data length detection means for detecting whether a data length of image data for one picture input reaches a predetermined value (fig. 4 box 34, divides each video PES packet into a TS packet of length 188 bytes, col. 8 lines 4-7). Note the predetermined value is 188 bytes.

The system comprises packetizing means for the variable-length encoding image data in accordance with the output of the header detecting and data length detecting means (fig. 4 box 32, col. 2 lines 58-60).

Regarding claim 2 the packetizing means generates a PES packet (fig. 4 box 32) corresponding to data conforming to an MPEG system for variable length encoding image data (fig. 4 MPEG-1 system stream).

Regarding claim 3, a second packetizing means (fig. 4 box 34) for applying second packetization to packet data packetized by said packetizing means, by a predetermined length (col. 8 lines 4-7).

Regarding claim 4, the packet generated by the second packetizing means is a TS packet (col. 8 lines 4-7).

Regarding claim 6, a recording means for recording the variable-length encoding image data packetized by the packetizing means into a recording medium (fig. 3 box S5).

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshima as applied to claim 1 above, and further in view of Itoh (US 5,631,888).

Hiroshima is silent on an encoding apparatus further comprising a means for capturing an image of an object and for generating image data; and encoding means for applying variable length encoding to the image data.

Itoh teaches an encoding apparatus further comprising a means for capturing an image of an object and for generating image data; and encoding means for applying variable length encoding to the image data (fig. 1: $EU_{1..N}$, camera, MPEG1, col. 6 lines 57-63).

Therefore it would have been obvious to one of ordinary skill in the art, having both Hiroshima and Itoh before him/her and with the teachings [a] as shown by Hiroshima, a method and

apparatus for an encoding apparatus for packetizing variable-length encoded data by a packet format in which a header of a packet has an area indicating the length of the packet and the range of values indicating the packet length is limited, and [b] as shown by Itoh, an encoding apparatus further comprising a means for capturing an image of an object and for generating image data; and encoding means for applying variable length encoding to the image data, to be motivated to modify the system of Hiroshima by providing for a camera and editing unit for generating MPEG-1 data. This would improve the system by providing for a reliable method for generating MPEG-1 system stream that is input into the demultiplexer of Hiroshima.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshima (US 5,801,781) in view of Michener (US 6,323,909).

Regarding claims 7 and 8, Hiroshima teaches a method and apparatus for an encoding apparatus for packetizing (fig. 4 box 32) variable-length encoded data (MPEG1 system streams, col. 2 lines 51-54) by a packet format in which a header of a packet has an area indicating the length of the packet (fig. 7 box 136, col. 9 lines 21-23) and the range of values indicating the packet length is limited (fig. 7 box 136, 190).
The system comprises an inputting means for inputting variable length encoding image data that includes a picture header indicating the start of one picture (fig. 4: Video ES stream, fig. 7 box 138). The inputting means occurs prior to the Video ES stream reaching the PES PACKETIZER (fig. 4 box 32).

The system comprises a header detecting means for detecting the picture header input by said inputting means (fig. 4: Video ES stream, fig. 7 box 138). The header detector means occurs at the PES PACKETIZER (fig. 4 box 32). If the system could not detect the header then the multiplexer (fig. 4 box 32) could not divide the packets col. 8 lines 4-7).

The system comprises a data length detection means for detecting whether a data length of image data for one picture

input reaches a predetermined value (fig. 4 box 34, divides each video PES packet into a TS packet of length 188 bytes, col. 8 lines 4-7). Note the predetermined value is 188 bytes.

The system comprises packetizing means for the variable-length encoding image data in accordance with the output of the header detecting and data length detecting means (fig. 4 box 32, col. 2 lines 58-60).

Regarding claim 8, in addition to the limitations previously listed, a recording medium which can read by a computer and which records a program for packetizing variable length encoding data by a packet format (fig. 3 box S5).

Although Hiroshima teaches the predetermined packet length is 188 bytes (col. 8 lines 4-7), the reference is silent is silent on the predetermined value being less than or equal to a maximum value of the packet length which can be specified in the header.

Michner teaches PES packets have a maximum length of 64 kilobytes (col. 4 lines 49-50) and the maximum value can be specified in the packet header (fig. 7 box 136).

Therefore it would have been obvious to one of ordinary skill in the art, having both Hiroshima and Michner before him/her and with the teachings [a] as shown by Hiroshima, a method and apparatus for an encoding apparatus for packetizing

variable-length encoded data, and [b] as shown by Michner, PES packets have a maximum length of 64 kilobytes and the maximum value can be specified in the packet header, to be motivated to modify the system of Hiroshima by modifying the packet data format of Hiroshima to include a maximum packet size field. This modification can be performed in software. This would improve the system by making the system of Hiroshima easy to integrate in larger systems that process different packet formats and the maximum size of the packet is not be known by the system.

Response to Arguments

6. Applicant's arguments filed 7/10/2003 have been fully considered but they are not persuasive.

Applicant contends Hiroshima does not detecting whether a data length of image data reaches a predetermined value (applicant: pg. 11 lines 13-15). As stated above the multiplexer (fig. 4 box 34) divides the image data into a TS packet having a fixed length of 188 bytes (col. 8 lines 4-8). The applicant further contends the predetermined value is less than or equal to a maximum value of the packet length which can be specified in the header (applicant: pg. 11 lines 15-16). Note this limitation is found only in independent claims 7 and 8, not in independent claim 1. As stated above, it is well known in the art that PES

packets have a maximum length of 64 kilobytes (Michener: US 6,323,909 col. 4 lines 49-50). Note the predetermined value 188 bytes is less than the maximum PES packet length of 64 Kbytes. The value of 64 Kbytes could be specified in the packet header (fig. 7 box 136). In addition, the applicant states Hiroshima lacks a variable-length packetizing variable-length encoding image data in accordance with the output of the header detecting and data length detecting means (applicant: 16-18). The examiner maintains this limitation is taught by Hiroshima (fig. 4 box 32, col. 2 lines 58-60).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Ronald Abelson
Examiner
Art Unit 2666

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Seema S. Rao
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